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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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NILS H. LJUNGMAN & ASSOCIATES
P. O. BOX 130
GREENSBURG, PA 15601-0130

EXAMINER

BOLDEN, ELIZABETH A

ART UNIT	PAPER NUMBER
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1755

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DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/727,998

Applicant(s)

MITRA ET AL.

Examiner

Elizabeth A. Bolden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-31 and 36-44 is/are rejected.
- 7) ☒ Claim(s) 32-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Any rejections and or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

Claim Objections

Claims 24, 27, and 29 are objected to because of the following informalities: unclear range limitation.

In claims 24, 27, and 29 under the limitation labeled (H) the claim recites "in total one of: up to about 1% by weight of a refining agent and up to 0.5 % by weight of a refining agent". This dual range limitation is confusing and in view of claims 40 and 41 the Examiner believes that the second ranges is to further limit the first range. The Examiner suggests deleting the 0.5% range from claims 24, 27, and 29 (H) for clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23-27, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 23, 24, 26, 27, and 29 recite the limitation "Cs₂O up to at most about 2.5". The Examiner reads the limitation "up to at most" to include zero as a lower limit. However, on page 54 of Applicant's response filed 24 April 2003, Applicants argue that the reference does not contain any Cs₂O and therefore does not teach or suggest the limitation of "Cs₂O up to at most about 2.5". By this argument it appears to the Examiner that Cs₂O must be contained in a non-zero quantity. This conflict in the terminology renders claims 23, 24, 26, 27, and 29 indefinite.

Claims 25, 27, and 29 recite the limitation "up to about 5% by weight of one member of the group and combinations thereof: Rb₂O, La₂O₃, Y₂O₃, and GeO₂". The Examiner reads the limitation "up to at most" to include zero as a lower limit. However, on page 54 of Applicant's response filed 24 April 2003, Applicants argue that the reference does not contain any Rb₂O, La₂O₃, Y₂O₃, and GeO₂ and therefore does not teach or suggest the limitation of "up to about 5% by weight of one member of the group and combinations thereof: Rb₂O, La₂O₃, Y₂O₃, and GeO₂". By this argument it appears to the Examiner that Rb₂O, La₂O₃, Y₂O₃, and GeO₂ must be contained in a non-zero quantity. This conflict in the terminology renders claims 23, 24, 26, 27, and 29 indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paloschi et al., U.S. Patent 6,235,667.

Paloschi et al. teach a glass composition having overlapping ranges of components with instant claims 23-27. See abstract of Paloschi et al., column 4, lines 35-57, and column 5, lines 36-40. Paloschi et al. teach overlapping ranges of refractive index with instant claims 23-27. See column 2, lines 59-62.

Paloschi et al. fail to teach any anticipatory examples or compositional ranges and optical properties sufficiently specific to anticipate the instant invention. However, Paloschi et al. teach ranges of components and refractive indices, which overlap instant claims 24-27. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

The reference fails to teach the Abbe number of instant claims 23 and 25. However, one of ordinary skill in the art would expect that a glass with overlapping compositional ranges and an overlapping refractive index would have the same Abbe number as recited in claims 23 and 25.

Claims 25, 30, 31, 36, and 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tachibana et al., U.S. Patent 4,472,030.

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Tachibana et al. teach an optical glass composition having overlapping ranges of components with instant claims 25, 30, 31, 36, and 40-44. See abstract of Tachibana et al. Tachibana et al. teach that the optical glass can be used as a light converging lens. See abstract.

Tachibana et al. fail to teach any anticipatory examples or compositional ranges and optical properties sufficiently specific to anticipate the instant invention. However, Tachibana et al. teach ranges of components, which overlap instant claims 25, 30, 31, 36, and 40-44. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

The reference fails to teach the light transmission, Abbe number and refractive index of instant claims 25, 30, and 36. However, one of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same light transmission, Abbe number, and refractive index as recited in claims 25, 30, and 36.

Claims 23-31 and 36-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speit, U.S. Patent 4,820,326.

Speit teaches an optical filter glass composition having overlapping ranges of components with instant claims 23-31 and 36-44. See abstract of Speit.

Speit fails to teach any anticipatory examples or compositional ranges and optical properties sufficiently specific to anticipate the instant invention. However, Speit teaches

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ranges of components, which overlap instant claims 23-31 and 36-44. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

The reference fails to teach the light transmission, Abbe number and refractive index of instant claims 23-25, 30, and 36. However, one of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same light transmission, Abbe number, and refractive index as recited in claims 23-25, 30, and 36.

Claims 23-31, 36, and 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritze, U.S. Patent 4,106,946.

Ritze teaches an optical absorption edge filter glass composition having overlapping ranges of components with instant claims 23-31, 36, and 40-44. See abstract of Ritze.

Ritze fails to teach any anticipatory examples or compositional ranges and optical properties sufficiently specific to anticipate the instant invention. However, Ritze teaches ranges of components, which overlap instant claims 23-31, 36, and 40-44. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the

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reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

The reference fails to teach the light transmission, Abbe number and refractive index of instant claims 23-25, 30, and 36. However, one of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same light transmission, Abbe number, and refractive index as recited in claims 23-25, 30, and 36.

Allowable Subject Matter

Claims 32-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 24 April 2003 have been fully considered but they are not persuasive.

Applicants argue that Paloschi et al., '667 teaches a glass for imitation lead crystal tableware and glassware, which does not contain lead. Applicants further argue that Paloschi et al. state that the optical glasses of Tachibana and Ritze are not suitable for tableware. On page 33 of Applicants' response, Applicants argue that since Paloschi et al. state that the optical glasses of Tachibana and Ritze are unsuitable for tableware, it is therefore, well known in the art that optical glasses and tableware are unrelated.

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This argument is not found persuasive for the following reasons. First, claims 23, 25, and 30 recite “a zinc-containing optical glass, suitable for use as an optical element”, which is a statement of intended use. MPEP 2111.02 states:

“During examination, statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art. If so, the recitation serves to limit the claim. ... If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim.”

There is no shown structural difference between the glasses of Paloschi et al. and the instant invention. Therefore the recitation of “suitable for use as an optical element” is non-limiting.

Secondly, the Applicants argue that the glasses of Paloschi et al. are not suitable for optical elements since the glasses of Ritze and Tachibana are not suitable for tableware. This is not persuasive. Paloschi et al. invention was directed at imitation lead crystal tableware. Crystal tableware is defined as being a high quality clear and colorless glass. See The American Heritage Dictionary and column 3, lines 52-53 of Paloschi et al. Paloschi et al. clearly states that the glass of Ritze is colored and therefore not suitable for tableware. The instant inventions as recited in claims 23, 25, 30 recite the limitation that the glass need only be “suitable for use as an optical element”, since Paloschi et al. teach a composition having overlapping ranges of components with the instant invention one of ordinary skill in the art at the time the invention was made would have found it obvious that the glasses of Paloschi et al. would be suitable for non-colored optical elements. See above rejection and MPEP 2144.05

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The examiner acknowledges the Applicants probability arguments in regards to the rejections over Tachibana et al., Speit, and Ritze. For example, Applicants argue that based on the glass composition of Tachibana et al. one of ordinary skill in the art has a very low probability of selecting a glass having overlapping ranges especially since for BaO the overlap is very small at only from 0 to <0.9 wt%. This is not found persuasive since Tachibana et al. does disclose examples that require no BaO as well as 30 wt%. See Table 1 of Tachibana et al. Therefore, Applicant's argument surrounding the probability are acknowledged but are not found persuasive, because the compositional ranges overlap and Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Applicants argue that Speit and Ritze do not meet the limitations in the claims for the following components: Cs₂O or one of Rb₂O, La₂O₃, Y₂O₃, and GeO₂ because Speit and Ritze do not teach or suggest the inclusion Cs₂O, Rb₂O, La₂O₃, Y₂O₃, or GeO₂ into the glass composition. However, the claim language is "up to at most", where the Examiner reads "up to at most" to include zero weight percent. Therefore this argument surrounding the inclusion of Cs₂O or one of Rb₂O, La₂O₃, Y₂O₃, and GeO₂ is not persuasive. See above indefiniteness rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124. The examiner can normally be reached on 8:30am to 6:00 pm with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EAB
July 11, 2003


DAVID SAMPLE
PRIMARY EXAMINER